



Attorney's Docket No.: 42P17292

Patent

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Re Application of:

Brian Doyle et al

U.S. Serial No: 10/816,232

Filed: March 31, 2004

For: SEMICONDUCTOR DEVICE
HAVING A Laterally Modulated
Gate Workfunction and Method
of Fabrication

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Examiner: Wojciechowicz, Edward J

Art Unit: 2815

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage in an envelope addressed to the Commissioner for Patents, PO Box 1450, Alexandria, Virginia 22313-1450

JANUARY 9, 2005

Date of Deposit

TERESA MATHY

Name of Person Mailing Correspondence

TERESA MATHY

Signature

1/9/06

Date

INFORMATION DISCLOSURE STATEMENT

Sir:

Enclosed is a copy of Information Disclosure Citation Form PTO-1449 or PTO/SB/08 together with copies of the documents cited on that form, except for copies not required to be submitted (e.g., copies of U.S. patents and U.S. published patent applications need not be enclosed). It is respectfully requested that the cited documents be considered and that the enclosed copy of Information Disclosure Citation Form PTO-1449 or PTO/SB/08 be initialed by the Examiner to indicate such consideration and a copy thereof returned to applicant(s).

Pursuant to 37 C.F.R. § 1.97, the submission of this Information Disclosure Statement is not to be construed as a representation that a search has been made and is not to be construed as an admission that the information cited in this statement is material to patentability.

Pursuant to 37 C.F.R. § 1.97, this Information Disclosure Statement is being submitted under one of the following (as indicated by an "X" to the left of the appropriate paragraph):

01/12/2006 HDESTA1 00000021 10816232

01 FC:1806

180.00 OP

_____ 37 C.F.R. §1.97(b).

 X 37 C.F.R. §1.97(c). If so, then enclosed with this Information Disclosure Statement is one of the following:

_____ A statement pursuant to 37 C.F.R. §1.97(e) or

 X A check for \$180.00 for the fee under 37 C.F.R. § 1.17(p).

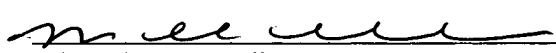
_____ 37 C.F.R. §1.97(d). If so, then enclosed with this Information Disclosure Statement are the following:

- (1) A statement pursuant to 37 C.F.R. §1.97(e); and
- (2) A check for \$180.00 for the fee under 37 C.F.R. §1.17(p) for submission of the Information Disclosure Statement.

If there are any additional charges, please charge Deposit Account No. 02-2666.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Dated: 1/9/06, 2005 
Michael A. Bernadicou
35,934

Customer No.: 008791
12400 Wilshire Blvd.
Seventh Floor
Los Angeles, CA 90025
(408) 720-8300

A circular stamp from the Office of Intellectual Property (OIP). The text "OIP" is at the top, "PATENT & TRADEMARK OFFICE" is around the bottom, and "JAN 12 2006" is in the center. There is also some text on the right side that is partially cut off, including "INF" and "ST".

(use as many sheets as necessary)

Application Number	10/816,232
Filing Date	3/31/2004
First Named Inventor:	Brian Doyle
Art Unit	2815
Examiner Name	Wojciechowicz, Edward J

Sheet	1	of	2	Attorney Docket Number	42P17292
-------	---	----	---	------------------------	----------

[illegible]

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				
		JP 62073668	04/04/1987	Yamamoto		
		JP 05226362	9/3/1993	Matshuhashi		
		JP 05243564	9/21/1993	Yoshihiro		
		EP 0856892 A2	8/5/1998	Okihara et al.		
		WO 0077828 A2	12/21/2000	Stolk et al.		

Examiner Signature		Date Considered	
-----------------------	--	-----------------	--

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer.

Based on Form PTO/SB/08A (08-03) as modified by BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP on 09/10/03.

Substitute for Form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	10/816,232
				Filing Date	3/31/2004
				First Named Inventor:	Brian Doyle
				Art Unit	2815
				Examiner Name	Wojciechowicz, Edward J
Sheet 2 of 2				Attorney Docket Number	42P17292

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
		International Searching Authority Report (ISR) PCT/US05/010506 and Written Opinion of ISA mailed 11/30/2005.	
		ANONYMOUS: "MOS Transistor with Engineered Metal Electrodes, including fabrication process." Research Disclosure, Kenneth Mason Publications, Westbourne, GB, vol. 438, no. 1, Oct. 2000.	
		FROHLICH K ET AL: "Ru and RuO2 gate electrodes for advanced CMOS technology" Materials Science and Engineering B, Elsevier Sequoia, Lausanne, CH, vol. 109, no. 1-3, 5 March 2004, pages 117-121.	
		LANDER R J P ET AL: "A Tuneable Metal Gate Work Function Using Solid State Diffusion of Nitrogen," Proceedings of the 32 nd European Solid-State Device Research Conference, Univ. of Bologna, Bologna, Italy, 2002, pp 103-106.	
		LIN R ET AL, "An Adjustable Work Function Technology Using Mo Gate for CMOS Devices," IEEE Electron Device Letters, IEEE Inc., New York, vol. 23, no. 1, Jan 2002, pp.49-51.	

Examiner Signature	Date Considered
--------------------	-----------------

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SENT FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.